

Amendments to the Abstract:

Please amend the Abstract as shown below:

Abstract

An apparatus for treating harmful substances contained in a waste gas discharged from waste burning ~~plant including plants~~ includes an insulating honeycomb structural body made of ceramics containing a photocatalytic material ~~having photocatalysis~~, a number of through holes formed in the honeycomb structural body in parallel with each other, first and second mesh electrodes arranged on respective end surfaces of the honeycomb structural body, and a pulse supply source connected across the first and second mesh electrodes. ~~The A~~ waste gas is ~~flowed~~ flows through the through holes formed in the honeycomb structural body, while pulse corona discharge plasma is uniformly generated along the through holes. Harmful substances contained in the waste gas are decomposed by the high energy electrons and radicals generated by the discharge plasma, and the photocatalytic material ~~having photocatalysis~~ is excited with ~~by~~ ultraviolet radiation emitted from the discharge plasma to produce active oxygen which ~~decompose~~ decomposes and/or ~~oxidize~~ oxidizes the harmful substances.